Nuclear Instruments and Methods in Physics Research A 395 (1997) 459–468

ELSEVIER

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A

Author index

Abe, Y., see Morishima, N. 395 (1997) 287
Abousahl, S., M. Gourma and M. Bickel, Fast Fourier transform for Voigt profile: Comparison with some other algorithms 395 (1997) 231
Abramov, V., P. Goncharov, A. Gorin, A. Gurzhiev, A. Dyshkant, V. Evdokimov, V. Kolosov, A. Korablev, Yu. Korneev, A. Kostritskii, A. Krinitsyn, V. Kryshkin, V. Podstavkov, V. Polyakov, A. Shtannikov, S. Tereschenko, L. Turchanovich and A. Zaichenko, A hadron calorimeter with scintillators parallel to the beam 395 (1997) 185
Adams, R.L., Growth of high purity GaAs using low-pressure vapour-phase epitaxy 395 (1997) 125
Adams, R., R. Bates, C. Da Via, N.P. Johnson, V. O'Shea, A. Pickford, C. Raine and K. Smith, Preliminary results for LP VPE X-ray detectors 395 (1997) 129
Alexiev, D., see Lai, S.T. 395 (1997) 76
Antinori, F., A pixel detector system for ALICE 395 (1997) 404
Antinori, F., see Di Bari, D. 395 (1997) 391
Apotovsky, B.A., see Barber, H.B. 395 (1997) 421
Arai, I., see Sekikawa, S. 395 (1997) 190
Augustine, F.L., see Barber, H.B. 395 (1997) 421
Äystö, J., see Honkanen, A. 395 (1997) 217

Barber, H.B., B.A. Apotovsky, F.L. Augustine, H.H. Barrett, E.L. Dereniak, F.P. Doty, J.D. Eskin, W.J. Hamilton, D.G. Marks, K.J. Matherson, J.E. Venzon, J.M. Woolfenden and E.T. Young, Semiconductor pixel detectors for gamma-ray imaging in nuclear medicine 395 (1997) 421
Barberis, D., see Morettini, P. 395 (1997) 372
Barberis, D., see Di Bari, D. 395 (1997) 391
Barrera, M., see Ramos-Lerate, I. 395 (1997) 202
Barrett, H.H., see Barber, H.B. 395 (1997) 421
Bates, R., G. Casse, S. D'Auria, M. Glaser, V. O'Shea and K.M. Smith, Measurement of high-intensity proton beam profile with a GaAs SIU surface barrier detector 395 (1997) 26
Bates, R., see Adams, R. 395 (1997) 129
Bates, R., see Da Via, C. 396 (1997) 148
Bates, R.L., C. Da Via, S. D'Auria, V. O'Shea, C. Raine and K.M. Smith, The effects of radiation on gallium arsenide radiation detectors 395 (1997) 54
Battistoni, G., D.V. Camin, N. Fedyakin, G. Pessina and M. Sironi, Cryogenic performance of monolithic MESFET preamplifiers for LAr calorimetry 395 (1997) 134
Beche, J.-F., see Beuville, E. 395 (1997) 429
Becks, K.H., P. Borghi, M. Caccia, J.C. Clemens, M. Cohen-Solal, B. Courty, W. de Boer, P. Delpierre, J. Drees, P. Gerlach, K.W. Glitza, I.M. Gregor, L. Guglielmi, F. Hartmann, J.M. Heuser, J.J. Jaeger, M. Kaiser, S. Kersten, D. Knoblauch, A. Körpert, H. Leb, F. Ledroit, G. Maehlum, C. Meroni, S. Meyer, K. Moenig, T. Mouthuy, M. Pindo, M. Raymond, N. Redaelli, L. Roos, D. Sauvage, G. Tristram, J.P. Turlot, B. Uberschar, G. Vegni and M. Wielers, Progress in the construction of the DELPHI pixel detector 395 (1997) 398
Becks, K.H., see Di Bari, D. 395 (1997) 391
Beer, G.A., see Fujiwara, M.C. 395 (1997) 159
Beker, H., E. Chesi and P. Martinengo, Integration of the Omega-3 readout chip into a high energy physics experimental data acquisition system 395 (1997) 379
Beker, H., see Di Bari, D. 395 (1997) 391
Bergher, M., Measurements of spontaneous synchrotron oscillation in the SuperACO storage ring 395 (1997) 259
Bertolucci, E., see Da Via, C. 396 (1997) 148
Beusch, W., see Di Bari, D. 395 (1997) 391
Beuville, E., J.-F. Beche, C. Cork, V. Douence, T. Earnest, J. Millaud, D. Nygren, H. Padmore, B. Turko, G. Zizka, P. Datte and N.-H. Xuong, A 16×16 pixel array detector for protein crystallography 395 (1997) 429
Beveridge, J.L., see Fujiwara, M.C. 395 (1997) 159

0168-9002/97/$17.00 Copyright © 1997 Elsevier Science B.V. All rights reserved

Bickel, M., see Abousahl, S. . . . 395 (1997) 231
Blanquart, L., A. Mekkaoui, V. Bonzom and P. Delpierre, Pixel analog cells prototypes for ATLAS in DMILL technology . . . 395 (1997) 313
Bonvicini, V., see Colledani, C. . . . 395 (1997) 435
Bonzom, V., see Blanquart, L. . . . 395 (1997) 313
Borghi, P., see Becks, K.H. . . . 395 (1997) 398
Boscardin, M., see Dalla Betta, G.F. . . . 395 (1997) 344
Bottigli, U., see Da Via, C. . . . 396 (1997) 148
Bozzo, M., see Morettini, P. . . . 395 (1997) 372
Brodbeck, T.J. and A. Chilingarov, Simulation of charge collection and sharing in microstrip detectors . . . 395 (1997) 29
Brozel, M.R., Irradiation damage in GaAs particle detectors . . . 395 (1997) 88
Bukreeva, I.N., I.V. Kozhevnikov, Vertical synchrotron radiation beamline for proximity X-ray lithography: Theoretical analysis . . . 395 (1997) 244
Burger, P., see Di Bari, D. . . . 395 (1997) 391
Burov, A., see Seurer, M. . . . 395 (1997) 275
Buttar, C., Z. Doležal, J. Krištofik, J. Kubašta, V. Linhart, J.J. Mareš, S. Pospíšil, S. Walsh and I. Wilhelm, Study of GaAs detector response with low-energy protons . . . 395 (1997) 21
Buttar, C.M., GaAs detectors – A review . . . 395 (1997) 1
Buttar, C.M., see Manolopoulos, S. . . . 395 (1997) 13

Caccia, M., see Becks, K.H. . . . 395 (1997) 398
Camin, D.V., see Battistoni, G. . . . 395 (1997) 134
Campbell, M., E.H.M. Heijne, J. Kubašta, P. Middelkamp, S. Pospíšil, P. Šícho, W. Snoeys and V. Vrba, Silicon pixel devices as a slow neutron precise position detector . . . 395 (1997) 457
Campbell, M., see Da Via, C. . . . 396 (1997) 148
Campbell, M., see Cantatore, E. . . . 395 (1997) 318
Campbell, M., see Scharfetter, L. . . . 395 (1997) 369
Campbell, M., see Morettini, P. . . . 395 (1997) 372
Campbell, M., see Di Bari, D. . . . 395 (1997) 391
Canali, C., see Cola, A. . . . 395 (1997) 349
Cantatore, E., M. Campbell, E. Chesi, F. Corsi, D. De Venuto, G. Gramegna, E.H.M. Heijne, C. Marzocca, P. Middlekamp, L. Scharfetter, S. Simone and W. Snoeys, Statistical analysis and optimization of delay line chains for pixel readout electronics . . . 395 (1997) 318
Cantatore, E., see Scharfetter, L. . . . 395 (1997) 369
Cantatore, E., see Morettini, P. . . . 395 (1997) 372
Cantatore, E., see Di Bari, D. . . . 395 (1997) 391
Casas-Ruiz, M., see Ramos-Lerate, I. . . . 395 (1997) 202
Caso, C., see Morettini, P. . . . 395 (1997) 372
Casse, G., see Bates, R. . . . 395 (1997) 26
Castelli, E., see Colledani, C. . . . 395 (1997) 435
Catanesi, M.G., see Di Bari, D. . . . 395 (1997) 391
Cavallini, A., see Cola, A. . . . 395 (1997) 98
Cavallini, A., see Cola, A. . . . 395 (1997) 349
Chen, C.-Y. and C. Chung, Low intensity cosmic neutron measurements using a portable BF_3 counting system . . . 395 (1997) 195
Chesi, E., see Da Via, C. . . . 396 (1997) 148
Chesi, E., see Cantatore, E. . . . 395 (1997) 318
Chesi, E., see Beker, H. . . . 395 (1997) 379
Chesi, E., see Di Bari, D. . . . 395 (1997) 391
Chilingarov, A., J.S. Meyer and T. Sloan, Radiation damage due to NIEL in GaAs particle detectors . . . 395 (1997) 35
Chilingarov, A., see Brodbeck, T.J. . . . 395 (1997) 29
Chmill, V.B., A.V. Chuntonov, A.V. Smol, A.P. Vorobiev, S.S. Khludkov, A.A. Koretski, A.I. Potapov and O.P. Tolbanov, Radiation resistance of GaAs structures . . . 395 (1997) 65
Chung, C., see Chen, C.-Y. . . . 395 (1997) 195
Chuntonov, A.V., see Chmill, V.B. . . . 395 (1997) 65
Clemens, J.C., see Becks, K.H. . . . 395 (1997) 398
Cohen-Solal, M., see Becks, K.H. . . . 395 (1997) 398
Cola, A., F. Quaranta, L. Vasanelli, C. Canali, A. Cavallini, F. Nava and M.E. Fantacci, A study of the trap influence on the performance of semi-insulating GaAs detectors . . . 395 (1997) 349
Cola, A., L. Vasanelli, L. Reggiani, A. Cavallini and F. Nava, Microscopic modelling of semi-insulating GaAs detectors . . . 395 (1997) 98

Colledani, C., G. Comes, W. Dulinski, Y. Hu, F. Loddo, R. Turchetta, V. Bonvicini, E. Castelli, D. Pontoni, M. Prest, A. Rashevsky and A. Vacchi, Castor 1.0, a VLSI analog–digital circuit for pixel imaging applications . . . 395 (1997) 435
Comes, G., see Colledani, C. . . . 395 (1997) 435
Conti, M., see Da Via, C. . . . 396 (1997) 148
Cork, C., see Beuville, E. . . . 395 (1997) 429
Corsi, F., see Cantatore, E. . . . 395 (1997) 318
Cottereau-Larson, E., see Meunier, R. . . . 395 (1997) 207
Courty, B., see Becks, K.H. . . . 395 (1997) 398

Dalla Betta, G.F., G.U. Pignatel, G. Verzellesi and M. Boscardin, Si-PIN X-ray detector technology . . . 395 (1997) 344
D'Ambrosio, C., see Puertolas, D. . . . 395 (1997) 448
Dameri, M., see Morettini, P. . . . 395 (1997) 372
Darbo, G., see Morettini, P. . . . 395 (1997) 372
Darbo, G., see Di Bari, D. . . . 395 (1997) 391
Das, C., Possibilities for mixed mode chip manufacturing in EUROPRACTICE . . . 395 (1997) 306
Datte, P., see Beuville, E. . . . 395 (1997) 429
D'Auria, S., see Bates, R. . . . 395 (1997) 26
D'Auria, S., see Bates, R.L. . . . 395 (1997) 54
D'Auria, S., see Da Via, C. . . . 396 (1997) 148
D'Auria, S., see Di Bari, D. . . . 395 (1997) 391
Da Via, C., R. Bates, E. Bertolucci, U. Bottigli, M. Campbell, E. Chesi, M. Conti, S. D'Auria, C. Del Papa, M.E. Fantacci, G. Grossi, E. Heijne, E. Mancini, P. Middelkamp, C. Raine, P. Russo, V. O'Shea, L. Scharfetter, K. Smith, W. Snoeys and A. Stefanini, Gallium arsenide pixel detectors for medical imaging . . . 395 (1997) 148
Da Via, C., see Bates, R.L. . . . 395 (1997) 54
Da Via, C., see Adams, R. . . . 395 (1997) 129
Da Via, C., see Di Bari, D. . . . 395 (1997) 391
de Boer, W., see Becks, K.H. . . . 395 (1997) 398
Del Papa, C., see Da Via, C. . . . 396 (1997) 148
Delpierre, P., see Blanquart, L. . . . 395 (1997) 313
Delpierre, P., see Becks, K.H. . . . 395 (1997) 398
Dereniak, E.L., see Barber, H.B. . . . 395 (1997) 421
De Venuto, D., see Cantatore, E. . . . 395 (1997) 318
Di Bari, D., F. Antinori, D. Barberis, K.H. Becks, H. Beker, W. Beusch, P. Burger, M. Campbell, E. Cantatore, M.G. Catanesi, E. Chesi, G. Darbo, S. D'Auria, C. Da Via, S. Di Liberto, D. Elia, T. Gys, E.H.M. Heijne, H. Helstrup, A. Jacholkowski, J.J. Jæger, J. Jakubek, P. Jarron, W. Klempt, F. Krummenacher, K. Knudson, I. Kralik, J. Kubasta, J.C. Lassalle, R. Leitner, F. Lemeilleur, V. Lenti, M. Letheren, L. Lopez, D. Loukas, M. Luptak, V. Manzari, P. Martinengo, G. Meddeler, F. Meddi, M. Morando, A. Munns, F. Pellegrini, F. Pengg, S. Pospisil, E. Quercigh, J. Ridky, L. Rossi, K. Šafařík, S. Saladino, L. Scharfetter, G. Segato, S. Simone, K. Smith, W. Snoeys, G. Tomasicchio and V. Vrba, Performance of 0.5×10^6 sensitive elements pixel telescope in the WA97 heavy ion experiment at CERN . . . 395 (1997) 391
Di Liberto, S., see Di Bari, D. . . . 395 (1997) 391
Doležal, Z., see Buttar, C. . . . 395 (1997) 21
Donnelly, I.J. and M.L. Williams, Charge collection efficiency and current pulses in GaAs detectors . . . 395 (1997) 9
Donnelly, I., see Lai, S.T. . . . 395 (1997) 76
Doty, F.P., see Barber, H.B. . . . 395 (1997) 421
Douence, V., see Beuville, E. . . . 395 (1997) 429
Douglas, J.L., see Fujiwara, M.C. . . . 395 (1997) 159
Drebushko, A.E., see Filchenkov, V.V. . . . 395 (1997) 237
Drees, J., see Becks, K.H. . . . 395 (1997) 398
Dulinski, W., S. Gadomski, E. Nygaard, S. Roe and P. Weilhammer, Beam test results with the silicon pad detector . . . 395 (1997) 410
Dulinski, W., see Colledani, C. . . . 395 (1997) 435
Dyshkant, A., see Abramov, V. . . . 395 (1997) 185

Earnest, T., see Beuville, E. . . . 395 (1997) 429
Eich, Th., see Rogalla, M. . . . 395 (1997) 45
Eich, Th., see Rogalla, M. . . . 395 (1997) 49
Eich, Th., see Marder, D.G. . . . 395 (1997) 141
Elia, D., see Di Bari, D. . . . 395 (1997) 391
Emam, O., Implementation of a veto processing hardware . . . 395 (1997) 384
Eskin, J.D., see Barber, H.B. . . . 395 (1997) 421

Eskola, K., see Honkanen, A. 395 (1997) 217
Evans, N., see Rogalla, M. 395 (1997) 45
Evans, N., see Rogalla, M. 395 (1997) 49
Evans, N., see Marder, D.G. 395 (1997) 141
Evdokimov, V., see Abramov, V. 395 (1997) 185

Fantacci, M.E., see Da Via, C. 396 (1997) 148
Fantacci, M.E., see Cola, A. 395 (1997) 349
Fedyakin, N., see Battistoni, G. 395 (1997) 134
Filchenkov, V.V., A.E. Drebushko and A.I. Rudenko, New methods for analyzing multiple processes in muon catalyzed fusion 395 (1997) 237
Fossum, E.R., CMOS active pixel image sensors 395 (1997) 291
Franc, F., see Kopecky, M. 395 (1997) 281
Fransson, K., see Pedersen, F. 395 (1997) 443
Fujiwara, M.C., G.A. Beer, J.L. Beveridge, J.L. Douglas, T.M. Huber, R. Jacot-Guillarmod, S.K. Kim, P.E. Knowles, A.R. Kunselman, M. Maier, G.M. Marshall, G.R. Mason, F. Mulhauser, A. Olin, C. Petitjean, T.A. Porcelli and J. Zmeskal, Characterization of solidified gas thin film targets via alpha particle energy loss 395 (1997) 159
Furenlid, L., see Pullia, A. 395 (1997) 452

Gadomski, S., see Dulinski, W. 395 (1997) 410
Gagliardi, G., see Morettini, P. 395 (1997) 372
Gatti, E., A. Geraci and G. Ripamonti, Optimum time-limited filters for input signals of arbitrary shape 395 (1997) 226
Geppert, R., see Rogalla, M. 395 (1997) 45
Geppert, R., see Rogalla, M. 395 (1997) 49
Geppert, R., see Irsigler, R. 395 (1997) 71
Geppert, R., see Marder, D.G. 395 (1997) 141
Geraci, A., see Gatti, E. 395 (1997) 226
Gerlach, P., see Becks, K.H. 395 (1997) 398
Glaser, M., see Bates, R. 395 (1997) 26
Glitza, K.W., see Becks, K.H. 395 (1997) 398
Goncharov, P., see Abramov, V. 395 (1997) 185
Göppert, R., see Rogalla, M. 395 (1997) 45
Göppert, R., see Rogalla, M. 395 (1997) 49
Göppert, R., see Irsigler, R. 395 (1997) 71
Göppert, R., see Marder, D.G. 395 (1997) 141
Gorin, A., see Abramov, V. 395 (1997) 185
Gourma, M., see Abousahl, S. 395 (1997) 231
Gramegna, G., see Cantatore, E. 395 (1997) 318
Gregor, I.M., see Becks, K.H. 395 (1997) 398
Grossi, G., see Da Via, C. 396 (1997) 148
Guglielmi, L., see Becks, K.H. 395 (1997) 398
Gurzhiev, A., see Abramov, V. 395 (1997) 185
Gustafsson, L., see Pedersen, F. 395 (1997) 443
Gys, T., see Di Bari, D. 395 (1997) 391
Gys, T., see Puertolas, D. 395 (1997) 448

Hamilton, W.J., see Barber, H.B. 395 (1997) 421
Hartmann, F., see Becks, K.H. 395 (1997) 398
Hayakawa, T., see Ishii, T. 395 (1997) 210
Heijne, E., see Da Via, C. 396 (1997) 148
Heijne, E., see Morettini, P. 395 (1997) 372
Heijne, E., see Puertolas, D. 395 (1997) 448
Heijne, E.H.M., see Cantatore, E. 395 (1997) 318
Heijne, E.H.M., see Scharfetter, L. 395 (1997) 369
Heijne, E.H.M., see Di Bari, D. 395 (1997) 391
Heijne, E.H.M., see Campbell, M. 395 (1997) 457
Helstrup, H., see Di Bari, D. 395 (1997) 391
Hermon, H., see McGregor, D.S. 395 (1997) 101
Heuser, J.M., see Becks, K.H. 395 (1997) 398

Hirning, R., see Sadler, R. 395 (1997) 265
Honkanen, A., M. Oinonen, K. Eskola, A. Jokinen, J. Äystö and The ISOLDE Collaboration, Gas-silicon detector telescope for charged particle spectroscopy 395 (1997) 217
Horisberger, R., Design requirements and first results of an LHC adequate analogue block for the CMS pixel detector 395 (1997) 310
Hossain, I., see Ishii, T. 395 (1997) 210
Howard, A., see Scharfetter, L. 395 (1997) 369
Hu, Y., see Colledani, C. 395 (1997) 435
Huber, T.M., see Fujiwara, M.C. 395 (1997) 159
Humphries, D., see Schlueter, R.D. 395 (1997) 153
Humpston, G. and A.P. Needham, Advanced flip-chip solder bonding 395 (1997) 375

Inneman, A., see Kopecky, M. 395 (1997) 281
Irsigler, R., R. Geppert, R. Göppert, J. Ludwig, M. Rogalla, K. Runge, Th. Schmid, M. Webel and C. Weber, Influence of contacts and substrate on semi-insulating GaAs detectors 395 (1997) 71
Irsigler, R., see Rogalla, M. 395 (1997) 45
Irsigler, R., see Rogalla, M. 395 (1997) 49
Irsigler, R., see Marder, D.G. 395 (1997) 141
Ishii, T., M. Itoh, M. Ishii, A. Makishima, M. Ogawa, I. Hossain, T. Hayakawa and T. Kohno, Isomer-scope: A new instrument for in-beam γ-ray spectroscopy through deep inelastic collisions 395 (1997) 210
Ishii, M., see Ishii, T. 395 (1997) 210
Itoh, M., see Ishii, T. 395 (1997) 210

Jacholkowski, A., see Di Bari, D. 395 (1997) 391
Jacot-Guillarmod, R., see Fujiwara, M.C. 395 (1997) 159
Jæger, J.J., see Di Bari, D. 395 (1997) 391
Jaeger, J.J., see Becks, K.H. 395 (1997) 398
Jakubek, J., see Morettini, P. 395 (1997) 372
Jakubek, J., see Di Bari, D. 395 (1997) 391
Jarron, P., see Di Bari, D. 395 (1997) 391
Johnson, N.P., see Adams, R. 395 (1997) 129
Jokinen, A., see Honkanen, A. 395 (1997) 217
Jones, B.K., J. Santana and M. McPherson, Semiconductor detectors for use in high radiation damage environments – Semi-insulating GaAs or silicon? 395 (1997) 81
Jucienė, V., see Požela, J. 395 (1997) 145

Kaiser, M., see Becks, K.H. 395 (1997) 398
Kasper, E., see Sadler, R. 395 (1997) 265
Kavadias, S. and K. Misiakos, Three-dimensional simulation of charge transport in pixel detectors 395 (1997) 355
Kayser, J., see Sadler, R. 395 (1997) 265
Kenney, C.J., see Parker, S.I. 395 (1997) 328
Kersten, S., see Becks, K.H. 395 (1997) 398
Khludkov, S.S., L.S. Okaevich, A.I. Potapov and O.P. Tolbanov, GaAs structures with deep centres for ionizing radiation detection 395 (1997) 132
Khludkov, S.S., V.E. Stepanov and O.P. Tolbanov, Proton-induced displacement damage in GaAs and radiation-hardness of semiconductor detectors for high energy physics 395 (1997) 60
Khludkov, S.S., see Chmill, V.B. 395 (1997) 65
Kiliulis, R., see Vaitkus, J. 395 (1997) 94
Kim, S.K., see Fujiwara, M.C. 395 (1997) 159
Klempt, W., see Di Bari, D. 395 (1997) 391
Knoblauch, D., see Becks, K.H. 395 (1997) 398
Knowles, P.E., see Fujiwara, M.C. 395 (1997) 159
Knudson, K., see Di Bari, D. 395 (1997) 391
Kohno, T., see Ishii, T. 395 (1997) 210
Kolosov, V., see Abramov, V. 395 (1997) 185
Kopecky, M., A. Inneman, F. Franc and L. Pina, Surface finishing by lacquer-coating technique 395 (1997) 281
Korablev, A., see Abramov, V. 395 (1997) 185
Koretski, A.A., see Chmill, V.B. 395 (1997) 65
Korneev, Yu., see Abramov, V. 395 (1997) 185
Körpert, A., see Becks, K.H. 395 (1997) 398

Kostritskii, A., see Abramov, V. 395 (1997) 185
Kozhevnikov, I.V., see Bukreeva, I.N. 395 (1997) 244
Kralik, I., see Di Bari, D. 395 (1997) 391
Kraner, H.W., see Pullia, A. 395 (1997) 452
Krinitsyn, A., see Abramov, V. 395 (1997) 185
Krištofik, J., see Buttar, C. 395 (1997) 21
Krummenacher, F., see Di Bari, D. 395 (1997) 391
Kryshkin, V., see Abramov, V. 395 (1997) 185
Kubašta, J., see Buttar, C. 395 (1997) 21
Kubasta, J., see Morettini, P. 395 (1997) 372
Kubasta, J., see Di Bari, D. 395 (1997) 391
Kubašta, J., see Campbell, M. 395 (1997) 457
Kullander, S., see Pedersen, F. 395 (1997) 443
Kuno, Y., see Sekikawa, S. 395 (1997) 190
Kunselman, A.R., see Fujiwara, M.C. 395 (1997) 159

Lai, S.T., D. Alexiev, C. Schwab and I. Donnelly, Optical deep-level transient characterisation of gamma-irradiated semi-insulating gallium arsenide 395 (1997) 76
Lassalle, J.C., see Di Bari, D. 395 (1997) 391
Leb, H., see Becks, K.H. 395 (1997) 398
Ledroit, F., see Becks, K.H. 395 (1997) 398
Leitner, R., see Morettini, P. 395 (1997) 372
Leitner, R., see Di Bari, D. 395 (1997) 391
Lemeilleur, F., see Di Bari, D. 395 (1997) 391
Lenti, V., see Di Bari, D. 395 (1997) 391
Letheren, M., see Di Bari, D. 395 (1997) 391
Leutz, H., see Puertolas, D. 395 (1997) 448
Ligero, R.A., see Ramos-Lerate, I. 395 (1997) 202
Linhart, V., see Buttar, C. 395 (1997) 21
Loddo, F., see Colledani, C. 395 (1997) 435
Lopez, L., see Di Bari, D. 395 (1997) 391
Loukas, D., see Di Bari, D. 395 (1997) 391
Ludwig, J., see Rogalla, M. 395 (1997) 45
Ludwig, J., see Rogalla, M. 395 (1997) 49
Ludwig, J., see Irsigler, R. 395 (1997) 71
Ludwig, J., see Marder, D.G. 395 (1997) 141
Luptak, M., see Di Bari, D. 395 (1997) 391

Maehlum, G., see Becks, K.H. 395 (1997) 398
Maier, M., see Fujiwara, M.C. 395 (1997) 159
Makishima, A., see Ishii, T. 395 (1997) 210
Mancini, E., see Da Via, C. 396 (1997) 148
Mankel, R., A concurrent track evolution algorithm for pattern recognition in the HERA-B main tracking system 395 (1997) 169
Manolopoulos, S., C.M. Buttar, D. Morgan, W. Murray, P.J. Sellin and S.M. Walsh, Performance of a GaAs microstrip detector in a test beam experiment 395 (1997) 13
Manzari, V., see Di Bari, D. 395 (1997) 391
Marder, D.G., Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, M. Rogalla, K. Runge and Th. Schmid, Noise in GaAs detectors after irradiation 395 (1997) 141
Marder, D.G., see Rogalla, M. 395 (1997) 45
Marder, D.G., see Rogalla, M. 395 (1997) 49
Mareš, J.J., see Buttar, C. 395 (1997) 21
Marks, D.G., see Barber, H.B. 395 (1997) 421
Marlow, D.R., see Sekikawa, S. 395 (1997) 190
Marshall, G.M., see Fujiwara, M.C. 395 (1997) 159
Martinengo, P., see Beker, H. 395 (1997) 379
Martinengo, P., see Di Bari, D. 395 (1997) 391
Marzocca, C., see Cantatore, E. 395 (1997) 318
Mason, G.R., see Fujiwara, M.C. 395 (1997) 159
Matherson, K.J., see Barber, H.B. 395 (1997) 421
McGregor, D.S. and H. Hermon, Room-temperature compound semiconductor radiation detectors 395 (1997) 101
McPherson, M., see Jones, B.K. 395 (1997) 81

Meddeler, G., see Di Bari, D. 395 (1997) 391
Meddi, F. and M. Morando, Evaluation of radiation dose exposure for silicon pixel detectors in ALICE experiment 395 (1997) 416
Meddi, F., see Di Bari, D. 395 (1997) 391
Mekkaoui, A., see Blanquart, L. 395 (1997) 313
Meroni, C., see Becks, K.H. 395 (1997) 398
Meskinis, S., see Vaitkus, J. 395 (1997) 94
Meunier, R. and E. Cottereau-Larson, A new expression for the resolution of a uniform magnetic field analyser 395 (1997) 207
Meyer, J.S., see Chilingarov, A. 395 (1997) 35
Meyer, S., see Becks, K.H. 395 (1997) 398
Middelkamp, P., see Da Via, C. 396 (1997) 148
Middlekamp, P., see Cantatore, E. 395 (1997) 318
Middelkamp, P., see Scharfetter, L. 395 (1997) 369
Middelkamp, P., see Morettini, P. 395 (1997) 372
Middelkamp, P., see Campbell, M. 395 (1997) 457
Millaud, J., see Beuville, E. 395 (1997) 429
Mindas, C.R., see Sekikawa, S. 395 (1997) 190
Misiakos, K., see Kavadias, S. 395 (1997) 355
Moenig, K., see Becks, K.H. 395 (1997) 398
Morando, M., see Di Bari, D. 395 (1997) 391
Morando, M., see Meddi, F. 395 (1997) 416
Morettini, P., D. Barberis, M. Bozzo, C. Caso, M. Dameri, G. Darbo, G. Gagliardi, B. Osculati, C. Pizzorno, L. Rossi, G. Sette, F. Vernocchi, J. Ridky, P. Sicho, V. Vrba, R. Leitner, J. Jakubek, J. Kubasta, S. Pospisil, B. Sopko, M. Campbell, E. Cantatore, E. Heijne, P. Middelkamp, L. Scharfetter and W. Snoeys, Space resolution of a silicon pixel detector as a function of the track angle 395 (1997) 372
Morgan, D., see Manolopoulos, S. 395 (1997) 13
Morishima, N. and Y. Abe, Cross-sectional model for cold neutron scattering in liquid ^{4}He 395 (1997) 287
Mouthuy, T., see Becks, K.H. 395 (1997) 398
Mulhauser, F., see Fujiwara, M.C. 395 (1997) 159
Munns, A., see Di Bari, D. 395 (1997) 391
Murray, W., see Manolopoulos, S. 395 (1997) 13

Namajūnas, A., see Požela, J. 395 (1997) 145
Nava, F., see Cola, A. 395 (1997) 98
Nava, F., see Cola, A. 395 (1997) 349
Needham, A.P., see Humpston, G. 395 (1997) 375
Nygaard, E., see Dulinski, W. 395 (1997) 410
Nygren, D., see Beuville, E. 395 (1997) 429

Ogawa, M., see Ishii, T. 395 (1997) 210
Oinonen, M., see Honkanen, A. 395 (1997) 217
Okaevich, L.S., see Khludkov, S.S. 395 (1997) 132
Olin, A., see Fujiwara, M.C. 395 (1997) 159
Osculati, B., see Morettini, P. 395 (1997) 372
O'Shea, V., see Bates, R. 395 (1997) 26
O'Shea, V., see Bates, R.L. 395 (1997) 54
O'Shea, V., see Vaitkus, J. 395 (1997) 94
O'Shea, V., see Adams, R. 395 (1997) 129
O'Shea, V., see Da Via, C. 396 (1997) 148

Padmore, H., see Beuville, E. 395 (1997) 429
Parker, S.I., C.J. Kenney and J. Segal, 3D – A proposed new architecture for solid-state radiation detectors . . 395 (1997) 328
Pedersen, F., C. Rönnqvist, K. Fransson, L. Gustafsson and S. Kullander, Energy discrimination with an X-ray pixel detector – a Monte-Carlo simulation 395 (1997) 443
Pelgrom, M.J.M. and M. Vertregt, CMOS technology for mixed signal ICs 395 (1997) 298
Pellegrini, F., see Di Bari, D. 395 (1997) 391
Pengg, F., see Di Bari, D. 395 (1997) 391
Pessina, G., see Battistoni, G. 395 (1997) 134
Petitjean, C., see Fujiwara, M.C. 395 (1997) 159

Pickford, A., see Adams, R. 395 (1997) 129
Piedigrossi, D., see Puertolas, D. 395 (1997) 448
Pignatel, G.U., see Dalla Betta, G.F. 395 (1997) 344
Pina, L., see Kopecky, M. 395 (1997) 281
Pindo, M., Simulating charge collection in silicon pixel detectors 395 (1997) 360
Pindo, M., see Becks, K.H. 395 (1997) 398
Pisent, A., see Seurer, M. 395 (1997) 275
Pizzorno, C., see Morettini, P. 395 (1997) 372
Podstavkov, V., see Abramov, V. 395 (1997) 185
Polyakov, V., see Abramov, V. 395 (1997) 185
Pontoni, D., see Colledani, C. 395 (1997) 435
Porcelli, T.A., see Fujiwara, M.C. 395 (1997) 159
Pospíšil, S., see Buttar, C. 395 (1997) 21
Pospisil, S., see Morettini, P. 395 (1997) 372
Pospisil, S., see Di Bari, D. 395 (1997) 391
Pospíšil, S., see Campbell, M. 395 (1997) 457
Potapov, A.I., see Chmill, V.B. 395 (1997) 65
Potapov, A.I., see Khludkov, S.S. 395 (1997) 132
Požela, J., V. Jucienė, A. Namajūnas and K. Požela, An improved read-out system for GaAs charged particle detectors 395 (1997) 145
Požela, K., see Požela, J. 395 (1997) 145
Prest, M., see Colledani, C. 395 (1997) 435
Puertolas, D., D. Piedigrossi, H. Leutz, E. Heijne, T. Gys and C. D'Ambrosio, An overview of the hybrid silicon pixel array tube technology for position-sensitive photon detection 395 (1997) 448
Pullia, A., H.W. Kraner and L. Furenlid, New results with silicon pad detectors and low-noise electronics for absorption spectrometry 395 (1997) 452

Quaranta, F., see Cola, A. 395 (1997) 349
Quercigh, E., see Di Bari, D. 395 (1997) 391

Raine, C., see Bates, R.L. 395 (1997) 54
Raine, C., see Adams, R. 395 (1997) 129
Raine, C., see Da Via, C. 396 (1997) 148
Raith, B., A self-adjusting delay circuit for pixel read-out chips 395 (1997) 324
Ramos-Lerate, I., M. Barrera, R.A. Ligero and M. Casas-Ruiz, A new summing-correction method for gamma-efficiency calibration with multi-gamma-ray radionuclides 395 (1997) 202
Rashevsky, A., see Colledani, C. 395 (1997) 435
Raymond, M., see Becks, K.H. 395 (1997) 398
Redaelli, N., see Becks, K.H. 395 (1997) 398
Reggiani, L., see Cola, A. 395 (1997) 98
Ridky, J., see Morettini, P. 395 (1997) 372
Ridky, J., see Di Bari, D. 395 (1997) 391
Rinkevicius, V., see Vaitkus, J. 395 (1997) 94
Ripamonti, G., see Gatti, E. 395 (1997) 226
Roe, S., see Dulinski, W. 395 (1997) 410
Rogalla, M., Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, K. Runge, Th. Schmid and D.G. Marder, Radiation studies for GaAs in the ATLAS inner detector 395 (1997) 45
Rogalla, M., Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, K. Runge, Th. Schmid and D.G. Marder, Analysis of trapping and detrapping in semi-insulating GaAs detectors 395 (1997) 49
Rogalla, M., see Irsigler, R. 395 (1997) 71
Rogalla, M., see Marder, D.G. 395 (1997) 141
Rönnqvist, C., see Pedersen, F. 395 (1997) 443
Roos, L., see Becks, K.H. 395 (1997) 398
Rossi, L., see Morettini, P. 395 (1997) 372
Rossi, L., see Di Bari, D. 395 (1997) 391
Rudenko, A.I., see Filchenkov, V.V. 395 (1997) 237
Runge, K., see Rogalla, M. 395 (1997) 45
Runge, K., see Rogalla, M. 395 (1997) 49
Runge, K., see Irsigler, R. 395 (1997) 71
Runge, K., see Marder, D.G. 395 (1997) 141
Russo, P., see Da Via, C. 396 (1997) 148

Sadler, R., E. Kasper, R. Hirning and J. Kayser, Design of a magnetic lens doublet for a Mott polarimeter . . 395 (1997) 265
Saťafařík, K., see Di Bari, D. 395 (1997) 391
Saladino, S., see Di Bari, D. 395 (1997) 391
Santana, J., see Jones, B.K. 395 (1997) 81
Sauvage, D., see Becks, K.H. 395 (1997) 398
Scharfetter, L., M. Campbell, E. Cantatore, E.H.M. Heijne, A. Howard, P. Middelkamp and W. Snoeys, The influence of a magnetic field on the performance of a binary pixel detector system 395 (1997) 369
Scharfetter, L., see Da Via, C. 396 (1997) 148
Scharfetter, L., see Cantatore, E. 395 (1997) 318
Scharfetter, L., see Morettini, P. 395 (1997) 372
Scharfetter, L., see Di Bari, D. 395 (1997) 391
Schlueter, R.D., D. Humphries and J. Tanabe, Pure permanent magnet harmonics corrector ring 395 (1997) 153
Schmid, Th., see Rogalla, M. 395 (1997) 45
Schmid, Th., see Rogalla, M. 395 (1997) 49
Schmid, Th., see Irsigler, R. 395 (1997) 71
Schmid, Th., see Marder, D.G. 395 (1997) 141
Schwab, C., see Lai, S.T. 395 (1997) 76
Segal, J., see Parker, S.I. 395 (1997) 328
Segato, G., see Di Bari, D. 395 (1997) 391
Sekikawa, S., I. Arai, A. Suzuki, A. Watanabe, Y. Kuno, D.R. Marlow, C.R. Mindas and R.L. Wixted, A fast DSP-based calorimeter hit scanning system 395 (1997) 190
Sellin, P.J., see Manolopoulos, S. 395 (1997) 13
Sette, G., see Morettini, P. 395 (1997) 372
Seurer, M., C. Toepffer, V. Variale, A. Pisent, L. Tecchio and A. Burov, Cooling of particle beams: Intrabeam scattering, envelope instability and shear 395 (1997) 275
Shtannikov, A., see Abramov, V. 395 (1997) 185
Sicho, P., see Morettini, P. 395 (1997) 372
Šícho, P., see Campbell, M. 395 (1997) 457
Simone, S., see Cantatore, E. 395 (1997) 318
Simone, S., see Di Bari, D. 395 (1997) 391
Sironi, M., see Battistoni, G. 395 (1997) 134
Slenys, S., see Vaitkus, J. 395 (1997) 94
Sloan, T., see Chilingarov, A. 395 (1997) 35
Smetona, S., see Vaitkus, J. 395 (1997) 94
Smith, K., see Adams, R. 395 (1997) 129
Smith, K., see Da Via, C. 396 (1997) 148
Smith, K., see Di Bari, D. 395 (1997) 391
Smith, K.M., see Bates, R. 395 (1997) 26
Smith, K.M., see Bates, R.L. 395 (1997) 54
Smith, K.M., see Vaitkus, J. 395 (1997) 94
Smol, A.V., see Chmill, V.B. 395 (1997) 65
Snoeys, W., see Da Via, C. 396 (1997) 148
Snoeys, W., see Cantatore, E. 395 (1997) 318
Snoeys, W., see Scharfetter, L. 395 (1997) 369
Snoeys, W., see Morettini, P. 395 (1997) 372
Snoeys, W., see Di Bari, D. 395 (1997) 391
Snoeys, W., see Campbell, M. 395 (1997) 457
Sopko, B., see Morettini, P. 395 (1997) 372
Stefanini, A.k, see Da Via, C. 396 (1997) 148
Stepanov, V.E., see Khludkov, S.S. 395 (1997) 60
Storasta, J., see Vaitkus, J. 395 (1997) 94
Suzuki, A., see Sekikawa, S. 395 (1997) 190

Tanabe, J., see Schlueter, R.D. 395 (1997) 153
Tecchio, L., see Seurer, M. 395 (1997) 275
Tereschenko, S., see Abramov, V. 395 (1997) 185
The ISOLDE Collaboration, see Honkanen, A. 395 (1997) 217
Toepffer, C., see Seurer, M. 395 (1997) 275
Tolbanov, O.P., see Khludkov, S.S. 395 (1997) 60
Tolbanov, O.P., see Chmill, V.B. 395 (1997) 65
Tolbanov, O.P., see Khludkov, S.S. 395 (1997) 132

Tomasicchio, G., see Di Bari, D. 395 (1997) 391
Tristram, G., see Becks, K.H. 395 (1997) 398
Turchanovich, L., see Abramov, V. 395 (1997) 185
Turchetta, R., see Colledani, C. 395 (1997) 435
Turko, B., see Beuville, E. 395 (1997) 429
Turlot, J.P., see Becks, K.H. 395 (1997) 398

Uberschar, B., see Becks, K.H. 395 (1997) 398

Vacchi, A., see Colledani, C. 395 (1997) 435
Vaitkus, J., J. Storasta, R. Kiliulis, V. Rinkevicius, S. Slenys, S. Smetona, S. Meskinis, K.M. Smith and V. O'Shea, Traps in GaAs detectors (before and after irradiation) and electric field redistribution in excited SI-GaAs 395 (1997) 94
Variale, V., see Seurer, M. 395 (1997) 275
Vasanelli, L., see Cola, A. 395 (1997) 98
Vasanelli, L., see Cola, A. 395 (1997) 349
Vegni, G., see Becks, K.H. 395 (1997) 398
Venzon, J.E., see Barber, H.B. 395 (1997) 421
Vernocchi, F., see Morettini, P. 395 (1997) 372
Vertregt, M., see Pelgrom, M.J.M. 395 (1997) 298
Verzellesi, G., see Dalla Betta, G.F. 395 (1997) 344
Vorobiev, A.P., see Chmill, V.B. 395 (1997) 65
Vrba, V., see Morettini, P. 395 (1997) 372
Vrba, V., see Di Bari, D. 395 (1997) 391
Vrba, V., see Campbell, M. 395 (1997) 457

Walsh, S., see Buttar, C. 395 (1997) 21
Walsh, S.M., see Manolopoulos, S. 395 (1997) 13
Watanabe, A., see Sekikawa, S. 395 (1997) 190
Webel, M., see Irsigler, R. 395 (1997) 71
Weber, C., see Irsigler, R. 395 (1997) 71
Weilhammer, P., see Dulinski, W. 395 (1997) 410
Wielers, M., see Becks, K.H. 395 (1997) 398
Wilhelm, I., see Buttar, C. 395 (1997) 21
Williams, M.L., see Donnelly, I.J. 395 (1997) 9
Wixted, R.L., see Sekikawa, S. 395 (1997) 190
Woolfenden, J.M., see Barber, H.B. 395 (1997) 421

Xuong, N.-H., see Beuville, E. 395 (1997) 429

Young, E.T., see Barber, H.B. 395 (1997) 421

Zaichenko, A., see Abramov, V. 395 (1997) 185
Zizka, G., see Beuville, E. 395 (1997) 429
Zmeskal, J., see Fujiwara, M.C. 395 (1997) 159

ELSEVIER

Nuclear Instruments and Methods in Physics Research A 395 (1997) 469–473

NUCLEAR INSTRUMENTS & METHODS IN PHYSICS RESEARCH Section A

Subject index

Accelerators, Beam Handling and Targets

Pure permanent magnet harmonics corrector ring, R.D. Schlueter, D. Humphries and J. Tanabe 395 (1997) 153

Characterization of solidified gas thin film targets via alpha particle energy loss, M.C. Fujiwara, G.A. Beer, J.L. Beveridge, J.L. Douglas, T.M. Huber, R. Jacot-Guillarmod, S.K. Kim, P.E. Knowles, A.R. Kunselman, M. Maier, G.M. Marshall, G.R. Mason, F. Mulhauser, A. Olin, C. Petitjean, T.A. Porcelli and J. Zmeskal . . . 395 (1997) 159

High Energy Physics Detectors

Proceedings of the Fourth International Workshop on GaAs Detectors and Related Compounds
(Aberfoyle, Scotland, June 3–6, 1996)

Section I. GaAs detector developments

GaAs detectors – A review, C.M. Buttar 395 (1997) 1

Charge collection efficiency and current pulses in GaAs detectors, I.J. Donnelly and M.L. Williams 395 (1997) 9

Performance of a GaAs microstrip detector in a test beam experiment, S. Manolopoulos, C.M. Buttar, D. Morgan, W. Murray, P.J. Sellin and S.M. Walsh 395 (1997) 13

Study of GaAs detector response with low-energy protons, C. Buttar, Z. Doležal, J. Krištofik, J. Kubašta, V. Linhart, J.J. Mareš, S. Pospíšil, S. Walsh and I. Wilhelm 395 (1997) 21

Measurement of high-intensity proton beam profile with a GaAs SIU surface barrier detector, R. Bates, G. Casse, S. D'Auria, M. Glaser, V. O'Shea and K.M. Smith 395 (1997) 26

Simulation of charge collection and sharing in microstrip detectors, T.J. Brodbeck and A. Chilingarov 395 (1997) 29

Section II. Radiation hardness studies

Radiation damage due to NIEL in GaAs particle detectors, A. Chilingarov, J.S. Meyer and T. Sloan 395 (1997) 35

Radiation studies for GaAs in the ATLAS inner detector, M. Rogalla, Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, K. Runge, Th. Schmid and D.G. Marder 395 (1997) 45

Analysis of trapping and detrapping in semi-insulating GaAs detectors, M. Rogalla, Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, K. Runge, Th. Schmid and D.G. Marder 395 (1997) 49

The effects of radiation on gallium arsenide radiation detectors, R.L. Bates, C. Da Via, S. D'Auria, V. O'Shea, C. Raine and K.M. Smith 395 (1997) 54

Proton-induced displacement damage in GaAs and radiation-hardness of semiconductor detectors for high energy physics, S.S. Khludkov, V.E. Stepanov and O.P. Tolbanov 395 (1997) 60

Radiation resistance of GaAs structures, V.B. Chmill, A.V. Chuntonov, A.V. Smol, A.P. Vorobiev, S.S. Khludkov, A.A. Koretski, A.I. Potapov and O.P. Tolbanov 395 (1997) 65

Section III. Material characterisation and theoretical modelling

Influence of contacts and substrate on semi-insulating GaAs detectors, R. Irsigler, R. Geppert, R. Göppert, J. Ludwig, M. Rogalla, K. Runge, Th. Schmid, M. Webel and C. Weber 395 (1997) 71

Optical deep-level transient characterisation of gamma-irradiated semi-insulating gallium arsenide, S.T. Lai, D. Alexiev, C. Schwab and I. Donnelly 395 (1997) 76

0168-9002/97/$17.00 Copyright © 1997 Elsevier Science B.V. All rights reserved

Semiconductor detectors for use in high radiation damage environments – Semi-insulating GaAs or silicon? B.K. Jones, J. Santana and M. McPherson 395 (1997) 81

Irradiation damage in GaAs particle detectors, M.R. Brozel 395 (1997) 88

Traps in GaAs detectors (before and after irradiation) and electric field redistribution in excited SI-GaAs, J. Vaitkus, J. Storasta, R. Kiliulis, V. Rinkevicius, S. Slenys, S. Smetona, S. Meskinis, K.M. Smith and V. O'Shea 395 (1997) 94

Microscopic modelling of semi-insulating GaAs detectors, A. Cola, L. Vasanelli, L. Reggiani, A. Cavallini and F. Nava 395 (1997) 98

Section IV. Detector materials

Room-temperature compound semiconductor radiation detectors, D.S. McGregor and H. Hermon 395 (1997) 101

Growth of high purity GaAs using low-pressure vapour-phase epitaxy, R.L. Adams 395 (1997) 125

Preliminary results for LP VPE X-ray detectors, R. Adams, R. Bates, C. Da Via, N.P. Johnson, V. O'Shea, A. Pickford, C. Raine and K. Smith 395 (1997) 129

GaAs structures with deep centres for ionizing radiation detection, S.S. Khludkov, L.S. Okaevich, A.I. Potapov and O.P. Tolbanov 395 (1997) 132

Section V. Technology and electronic developments

Cryogenic performance of monolithic MESFET preamplifiers for LAr calorimetry, G. Battistoni, D.V. Camin, N. Fedyakin, G. Pessina and M. Sironi 395 (1997) 134

Noise in GaAs detectors after irradiation, D.G. Marder, Th. Eich, N. Evans, R. Geppert, R. Göppert, R. Irsigler, J. Ludwig, M. Rogalla, K. Runge and Th. Schmid 395 (1997) 141

An improved read-out system for GaAs charged particle detectors, J. Požela, V. Jucienė, A. Namajūnas and K. Požela 395 (1997) 145

Gallium arsenide pixel detectors for medical imaging, C. Da Via, R. Bates, E. Bertolucci, U. Bottigli, M. Campbell, E. Chesi, M. Conti, S. D'Auria, C. Del Papa, M.E. Fantacci, G. Grossi, E. Heijne, E. Mancini, P. Middelkamp, C. Raine, P. Russo, V. O'Shea, L. Scharfetter, K. Smith, W. Snoeys and A. Stefanini 395 (1997) 148

A concurrent track evolution algorithm for pattern recognition in the HERA-B main tracking system, R. Mankel 395 (1997) 169

A hadron calorimeter with scintillators parallel to the beam, V. Abramov, P. Goncharov, A. Gorin, A. Gurzhiev, A. Dyshkant, V. Evdokimov, V. Kolosov, A. Korablev, Yu. Korneev, A. Kostritskii, A. Krinitsyn, V. Kryshkin, V. Podstavkov, V. Polyakov, A. Shtannikov, S. Tereschenko, L. Turchanovich and A. Zaichenko 395 (1997) 185

Proceedings of the Third International Workshop on Semiconductor Pixel Detectors for Particles and X-rays
(Bari, Italy, March 24–27, 1996)

Section I. Introductory paper

CMOS active pixel image sensors, E.R. Fossum 395 (1997) 291

Section II. Design of electronic readout circuits

CMOS technology for mixed signal ICs, M.J.M. Pelgrom and M. Vertregt 395 (1997) 298

Possibilities for mixed mode chip manufacturing in EUROPRACTICE, C. Das 395 (1997) 306

Design requirements and first results of an LHC adequate analogue block for the CMS pixel detector, R. Horisberger 395 (1997) 310

Pixel analog cells prototypes for ATLAS in DMILL technology, L. Blanquart, A. Mekkaoui, V. Bonzom and P. Delpierre 395 (1997) 313

Statistical analysis and optimization of delay line chains for pixel readout electronics, E. Cantatore, M. Campbell, E. Chesi, F. Corsi, D. De Venuto, G. Gramegna, E.H.M. Heijne, C. Marzocca, P. Middlekamp, L. Scharfetter, S. Simone and W. Snoeys 395 (1997) 318

A self-adjusting delay circuit for pixel read-out chips, B. Raith 395 (1997) 324

Section III. Design and technology for pixel sensors

3D – A proposed new architecture for solid-state radiation detectors, S.I. Parker, C.J. Kenney and J. Segal . . 395 (1997) 328

Si-PIN X-ray detector technology, G.F. Dalla Betta, G.U. Pignatel, G. Verzellesi and M. Boscardin 395 (1997) 344

Section IV. Signal formation in silicon and GaAs pixel sensors

A study of the trap influence on the performance of semi-insulating GaAs detectors, A. Cola, F. Quaranta, L. Vasanelli, C. Canali, A. Cavallini, F. Nava and M.E. Fantacci 395 (1997) 349

Three-dimensional simulation of charge transport in pixel detectors, S. Kavadias and K. Misiakos 395 (1997) 355

Simulating charge collection in silicon pixel detectors, M. Pindo 395 (1997) 360

The influence of a magnetic field on the performance of a binary pixel detector system, L. Scharfetter, M. Campbell, E. Cantatore, E.H.M. Heijne, A. Howard, P. Middelkamp and W. Snoeys 395 (1997) 369

Space resolution of a silicon pixel detector as a function of the track angle, P. Morettini, D. Barberis, M. Bozzo, C. Caso, M. Dameri, G. Darbo, G. Gagliardi, B. Osculati, C. Pizzorno, L. Rossi, G. Sette, F. Vernocchi, J. Ridky, P. Sicho, V. Vrba, R. Leitner, J. Jakubek, J. Kubasta, S. Pospisil, B. Sopko, M. Campbell, E. Cantatore, E. Heijne, P. Middelkamp, L. Scharfetter and W. Snoeys 395 (1997) 372

Section V. Interconnection and data readout

Advanced flip-chip solder bonding, G. Humpston and A.P. Needham 395 (1997) 375

Integration of the Omega-3 readout chip into a high energy physics experimental data acquisition system, H. Beker, E. Chesi and P. Martinengo 395 (1997) 379

Implementation of a veto processing hardware, O. Emam 395 (1997) 384

Section VI. Pixel detectors in particle physics experiments

Performance of 0.5×10^6 sensitive elements pixel telescope in the WA97 heavy ion experiment at CERN, D. Di Bari, F. Antinori, D. Barberis, K.H. Becks, H. Beker, W. Beusch, P. Burger, M. Campbell, E. Cantatore, M.G. Catanesi, E. Chesi, G. Darbo, S. D'Auria, C. Da Via, S. Di Liberto, D. Elia, T. Gys, E.H.M. Heijne, H. Helstrup, A. Jacholkowski, J.J. Jæger, J. Jakubek, P. Jarron, W. Klempt, F. Krummenacher, K. Knudson, I. Kralik, J. Kubasta, J.C. Lassalle, R. Leitner, F. Lemeilleur, V. Lenti, M. Letheren, L. Lopez, D. Loukas, M. Luptak, V. Manzari, P. Martinengo, G. Meddeler, F. Meddi, M. Morando, A. Munns, F. Pellegrini, F. Pengg, S. Pospisil, E. Quercigh, J. Ridky, L. Rossi, K. Šafařík, S. Saladino, L. Scharfetter, G. Segato, S. Simone, K. Smith, W. Snoeys, G. Tomasicchio and V. Vrba 395 (1997) 391

Progress in the construction of the DELPHI pixel detector, K.H. Becks, P. Borghi, M. Caccia, J.C. Clemens, M. Cohen-Solal, B. Courty, W. de Boer, P. Delpierre, J. Drees, P. Gerlach, K.W. Glitza, I.M. Gregor, L. Guglielmi, F. Hartmann, J.M. Heuser, J.J. Jaeger, M. Kaiser, S. Kersten, D. Knoblauch, A. Körpert, H. Leb, F. Ledroit, G. Maehlum, C. Meroni, S. Meyer, K. Moenig, T. Mouthuy, M. Pindo, M. Raymond, N. Redaelli, L. Roos, D. Sauvage, G. Tristram, J.P. Turlot, B. Uberschar, G. Vegni and M. Wielers 395 (1997) 398

A pixel detector system for ALICE, F. Antinori 395 (1997) 404

Beam test results with the silicon pad detector, W. Dulinski, S. Gadomski, E. Nygaard, S. Roe and P. Weilhammer 395 (1997) 410

Evaluation of radiation dose exposure for silicon pixel detectors in ALICE experiment, F. Meddi and M. Morando 395 (1997) 416

Section VII. Imaging with active pixel detectors

Semiconductor pixel detectors for gamma-ray imaging in nuclear medicine, H.B. Barber, B.A. Apotovsky, F.L. Augustine, H.H. Barrett, E.L. Dereniak, F.P. Doty, J.D. Eskin, W.J. Hamilton, D.G. Marks, K.J. Matherson, J.E. Venzon, J.M. Woolfenden and E.T. Young 395 (1997) 421

A 16×16 pixel array detector for protein crystallography, E. Beuville, J.-F. Beche, C. Cork, V. Douence, T. Earnest, J. Millaud, D. Nygren, H. Padmore, B. Turko, G. Zizka, P. Datte and N.-H. Xuong 395 (1997) 429

Castor 1.0, a VLSI analog–digital circuit for pixel imaging applications, C. Colledani, G. Comes, W. Dulinski, Y. Hu, F. Loddo, R. Turchetta, V. Bonvicini, E. Castelli, D. Pontoni, M. Prest, A. Rashevsky and A. Vacchi 395 (1997) 435

Energy discrimination with an X-ray pixel detector – a Monte-Carlo simulation, F. Pedersen, C. Rönnqvist, K. Fransson, L. Gustafsson and S. Kullander 395 (1997) 443

An overview of the hybrid silicon pixel array tube technology for position-sensitive photon detection, D. Puertolas, D. Piedigrossi, H. Leutz, E. Heijne, T. Gys and C. D'Ambrosio 395 (1997) 448

New results with silicon pad detectors and low-noise electronics for absorption spectrometry, A. Pullia, H.W. Kraner and L. Furenlid 395 (1997) 452

Silicon pixel devices as a slow neutron precise position detector, M. Campbell, E.H.M. Heijne, J. Kubašta, P. Middelkamp, S. Pospíšil, P. Šícho, W. Snoeys and V. Vrba 395 (1997) 457

High Energy Physics Systems

A fast DSP-based calorimeter hit scanning system, S. Sekikawa, I. Arai, A. Suzuki, A. Watanabe, Y. Kuno, D.R. Marlow, C.R. Mindas and R.L. Wixted 395 (1997) 190

Space Radiation and Neutrino Detectors

Low intensity cosmic neutron measurements using a portable BF_3 counting system, C.-Y. Chen and C. Chung 395 (1997) 195

Nuclear Spectroscopy

A new summing-correction method for gamma-efficiency calibration with multi-gamma-ray radionuclides, I. Ramos-Lerate, M. Barrera, R.A. Ligero and M. Casas-Ruiz 395 (1997) 202

Gamma, X-ray and Charged Particle Detectors

A new expression for the resolution of a uniform magnetic field analyser, R. Meunier and E. Cottereau-Larson 395 (1997) 207

Isomer-scope: A new instrument for in-beam γ-ray spectroscopy through deep inelastic collisions, T. Ishii, M. Itoh, M. Ishii, A. Makishima, M. Ogawa, I. Hossain, T. Hayakawa and T. Kohno 395 (1997) 210

Gas-silicon detector telescope for charged particle spectroscopy, A. Honkanen, M. Oinonen, K. Eskola, A. Jokinen, J. Äystö and The ISOLDE Collaboration 395 (1997) 217

Neutron Physics

Cross-sectional model for cold neutron scattering in liquid ^{4}He, N. Morishima and Y. Abe (*Letter to the Editor*) 395 (1997) 287

Electronics

Optimum time-limited filters for input signals of arbitrary shape, E. Gatti, A. Geraci and G. Ripamonti . . . 395 (1997) 226

Numerical and Data Analysis

Fast Fourier transform for Voigt profile: Comparison with some other algorithms, S. Abousahl, M. Gourma and M. Bickel 395 (1997) 231

New methods for analyzing multiple processes in muon catalyzed fusion, V.V. Filchenkov, A.E. Drebushko and A.I. Rudenko 395 (1997) 237

Synchrotron Radiation Research

Vertical synchrotron radiation beamline for proximity X-ray lithography: Theoretical analysis, I.N. Bukreeva, I.V. Kozhevnikov 395 (1997) 244

Measurements of spontaneous synchrotron oscillation in the SuperACO storage ring, M. Bergher 395 (1997) 259

Special Applications

Design of a magnetic lens doublet for a Mott polarimeter, R. Sadler, E. Kasper, R. Hirning and J. Kayser . . 395 (1997) 265

Cooling of particle beams: Intrabeam scattering, envelope instability and shear, M. Seurer, C. Toepffer, V. Variale, A. Pisent, L. Tecchio and A. Burov 395 (1997) 275

Technical Note

Surface finishing by lacquer-coating technique, M. Kopecky, A. Inneman, F. Franc and L. Pina 395 (1997) 281

Letter to the Editor

Cross-sectional model for cold neutron scattering in liquid ^{4}He, N. Morishima and Y. Abe 395 (1997) 287